

**ARCHITECTURE AND METHOD FOR PERFORMING A
FAST FOURIER TRANSFORM AND OFDM RECEIVER EMPLOYING THE SAME**

ABSTRACT OF THE DISCLOSURE

The present invention is directed to a fast Fourier transform (FFT) architecture. In one embodiment, the FFT architecture includes a pipeline segment having a plurality of data-independent pipelines that receive different time-domain data samples and generate therefrom corresponding intermediate results. Additionally, the FFT architecture also includes a parallel segment, coupled to all of the pipelines, that receives the corresponding intermediate results and generates therefrom corresponding frequency-domain results.